GEOGRAPHIC NEWS BULLETINS

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Photograph by Per Braaten

NORWEGIAN BRIDE, "VEILED" IN SILVER

The bride's silver "crown" is a symbol of the rural Norwegians' loyalty to customs and language of their Viking heritage (Bulletin No. 4).

HOW TEACHERS MAY OBTAIN THE BULLETINS

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The Yangtze Again a River of Destiny

"CHINA'S Joy!" "Life Artery of China!" "The Busiest River in the World!" Such popular titles indicate the important role that the Yangtze, Asia's mightiest and longest river, has played in history.

In recent weeks the Yangtze has appeared often in headlines throughout the world as a bitterly contested prize of war, as an avenue of westward escape for Chinese government officials from Nanking, and finally as the scene of the bombing and sinking of the United States Navy gunboat *Panay* by Japanese planes. Today the Yangtze's once-enormous boat traffic has been nearly halted by barriers of broken ships, sunk by the Chinese to block the path of Japanese warships. Officials of the Chinese government have retreated far up the Yangtze Valley to establish temporary headquarters at Hankow and Chungking.

Patrolled by U. S. for Seventy Years

To the American jack tar on foreign duty the Yangtze is one of the most familiar rivers in the world. For about seventy years the United States has helped to protect shipping from bandits along the mighty stream with a patrol consisting of several shallow-draft gunboats. This flotilla is one of two U. S. Navy units on guard outside of American territory. The other is on the Pearl River, the approach to Canton, south China.

The Yangtze Kiang, to use its full name (Kiang being one of the Chinese words for River) cannot quite claim to be either the greatest or the longest river in the world. Its length is about 3,000 miles and it is therefore exceeded by the Mississippi-Missouri, the Amazon, and the Nile. In volume it probably ranks third: after the Amazon and the Congo.

But the Yangtze can lay claim to something more than mere bigness or length. With its tributary rivers, lakes, and canals, it forms the inland water system most used, in normal times, by man as a carrier of his commerce.

The Yangtze rises in central Tibet, among a tangled mass of mountains and plateaus that also give birth to three other huge Asiatic streams: the Yellow, the Mekong, and the Salween. In its journey to the sea it cuts through several sharp mountain ranges, forming some of the deepest river gorges in the world. At one point in Yunnan Province, the gorge of the river is 13,000 feet deep. In 1923 and 1924 these far western gorges of the Yangtze were explored and for the first time photographed by an expedition of the National Geographic Society, headed by Dr. Joseph F. Rock.

Not Yangtze to Most Chinese

The river is known as the Yangtze chiefly to the Western World. It has perhaps a dozen names to the Chinese. Only the two or three hundred miles nearest the ocean go by the name "Yangtze Kiang" to the natives. The most popular names farther up are Chinese equivalents of "Long River" and "Great River." "Yangtze" itself means "Son of the Ocean."

The Yangtze is generally a west-east river, flowing in the lower Temperate Zone. Placed in the same latitude in America, it would rise in southwestern Arizona not far north of Yuma. Crossing into Texas, a few miles northeast of El Paso, it would zigzag down to Monterey, Mexico, its southernmost point. Turning northeastward it would then parallel the Gulf coast, a few miles inland, passing

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© *Per Braaten*

LUSTY NORWEGIAN VERSION OF THE "SQUARE DANCE" GOES ROUND AND ROUND AND ROUND!

Hop-hop-twirl is the procedure of the Norwegian *springdans* (running dance), which runs on and on with relays of fiddlers until all the dancers are exhausted. So closely does it follow festive tradition that the dance, the jigging music, the costumes with their stiff caps and embroidered aprons, and even the feast of flatbread and potato cakes would have fitted into another century without change. Folk tunes of Norway have been popularized everywhere in the songs and musical compositions of Edvard Grieg. This dance was a feature of a wedding festival. The bride, in the left foreground, wears a silver "crown" which sets her apart, for a day, from the rest (Bulletin No. 4).

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"Old Christmas," in January, Still Celebrated

CHRISTMAS is one of the first dates a child learns, and December 25 is a red-and-green-letter day on almost every calendar. But there have been calendars, and some are still in use, which wreathe the Christmas aura around other dates instead.

"Old Christmas" comes on January 6, as beached boats, furled nets and the latchstring out to Christmas visitors on that day still signify among fisherfolk long ago transplanted from England to a thin coastal strip of North Carolina.

Syrian congregations light their Christmas candles at church on golden altar screens, January 6. Armenian, Ruthenian, and Serbian celebrants likewise sniff Christmas incense on the January air, for their churches, too, are faithful to the calendar which Julius Caesar's Egyptian astronomer drew in 46 B. C., and which has run behind sun-time ever since—now as much as 13 days. Western Europe has long since adopted a more accurate schedule of the seasons, that instituted by Pope Gregory, in 1582, as the Gregorian calendar.

Where Presents Buy Mothers' Freedom from Mock Pirates

Children in parts of Romania, too, have a belated Christmas. Not until January 6 Christmas Eve can the young pirates-for-a-day tie Mother to a chair with string and demand that she ransom herself with presents.

The Christmas mass, in deep Slavonic voices, still echoes through mosque-like chapels and cathedrals in some Russian communities in January, as Julius Caesar's calendar requires. Little groups of Eskimos in Alaska, after their American neighbors have finished with Christmas cheer and New Year's resolutions, too, doggedly stage their Christmas on the date, January 7, they learned from Russian missionaries before the United States bought their country.

Ethiopian Christians, guided by the ancient Egyptian Coptic Church calendar, observe their Christmas season, or Ganna, around January 8.

That same Egyptian calendar, says tradition, assigned the first date for Christmas—May 20. Then a group of dissenters in Thrace started a rival religious festival on January 6, perhaps to commemorate both the birth and the baptism of Christ. It was called Epiphany, from the Greek for "manifestations," because, then, Christ was made manifest to the world. The baptism is associated with the "Blessing of the Waters," which became a regular Epiphany feature in Eastern churches (illustration, next page).

Befana Fills Italian Stockings for January 6

The modern date for Christmas coincides with that of a Roman pagan festival of Augustan days—Birthday of the Unconquerable Sun at the winter solstice. As the calendar and the seasons diverged, the date was pegged down on December 25 before they got farther apart.

Christmas laps over into January not only because some calendars haven't caught up with it, but because it probably started as a January celebration in the first place, as part of Epiphany.

Later, when *Cristes-maesse* was subtracted and given a day of its own, the January holy day began to be revered in western Europe for the "manifestation"—or Epiphany—of the infant Christ when "there came Wise Men from the east."

Gallic imagination soon gave the Wise Men both rank and retinue. Elaborate

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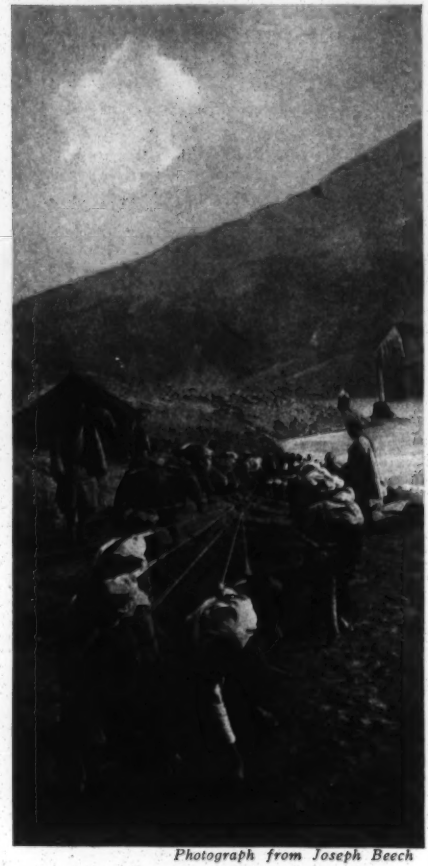
near Houston, New Orleans, and Pensacola, to flow into the Atlantic at Savannah.

On this re-located river, ocean-going ships would sail 640 miles westward to New Orleans, the relative position of Hankow, China's great inland port. Smaller river steamers would ascend more than 300 miles farther to Houston, the relative position of Chungking, head of steam navigation, passing en route through the famous mid-Yangtze gorges. Junks would ascend as far as the Texas-Mexican border and beyond.

The Yangtze is the life artery of China. It drains an area of 770,000 square miles, equal to one-quarter the total area of the United States; and in this basin live about 175,000,000 people. Railroads are few. Commerce that must supply the needs of vast hordes of workers and consumers (almost one-tenth of the population of the world) moves almost wholly by water: over the Great River itself and a network of streams, canals, and lakes that connect with it in its lower 1,000 miles.



Photograph from Joseph Beech

CONFLICT ON THE YANGTZE IS NOT ALWAYS NEWS

Man vs. river is a daily struggle on parts of the Yangtze, where native craft cannot move upstream against the rapids without manpower on the towpath to supplement sails. Coolies clawing the ground for handholds are being supplanted today by launches and steamboats.

At no other place in the world are three all-important trade needs so happily associated: a broad, deep natural waterway for ships and a teeming population living on fertile, cultivated soil. The Yangtze, from 30 to 40 miles wide at its mouth, is a broad open door to the sea inviting ships of the world to enter. Transshipping is unnecessary for 640 miles, ocean-going steamers ascending easily that distance to Hankow.

But broad as the Yangtze is, it is crowded in peace time, with traffic. The traveler finds no break in the unending stream of steamers, barges, junks and sampans. Often he encounters huge rafts of logs, on which crew and families have built little villages. On these floating islands, pigs and chickens wander about, children play, and women hang out their wash and carry on other domestic duties exactly as in Chinese hamlets on dry ground.

Note: See also "The Rise and Fall of Nanking," *National Geographic Magazine*, February, 1938; "Women's Work in Japan," January, 1938; "Landscaped Kwangsi, China's Pictorial Provinces," December, 1937; "Changing Shanghai," and "Peacetime Plant Hunting Around Peiping," October, 1937; "Grand Canal Panorama," April, 1937; "Friendly Journeys in Japan," April, 1936; "Approach to Peiping," February, 1936; "Coastal Cities of China," November, 1934; "Capital and Country of Old Cathay," (duotone insert), June, 1933; "From the Mediterranean to the Yellow Sea by Motor," November, 1932; "Cosmopolitan Shanghai, Key Seaport of China," September, 1932; "Raft Life on the Hwang Ho," June, 1932; "How Half the World Works," April, 1932; "The World's Greatest Overland Explorer," (Marco Polo), November, 1928; "Ho for the Soochow Ho," "The Geography of China," "Life Afloat in China," and "New China and the Printed Page," June, 1927; and "Farmers Since the Days of Noah," April, 1937.

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The Beaver—Animal "Engineer"—Put To Work

THERE is no unemployment problem among the beavers. As fast as they can be caught, beavers are being put to work on small-scale engineering jobs which forestry officials claim will prevent soil erosion, preserve timber supply, and beautify the landscape.

The newest beaver dam project is in Hyde State Park, Santa Fe, New Mexico. Four animals were taken to the area, from which their kind had disappeared, and freed in a mountain stream. Promptly the sharp-toothed and industrious little workers started gnawing down small aspen trees for dam building material. When spring rains swell the mountain stream, their dams will hinder the washing away of valuable top soil.

Beavers have long proved man's friend by damming streams and creating ponds to conserve water, making it available throughout dry months. Thus they have made possible grazing for cattle on several ranges in the national forests of Colorado, on areas once useless because of lack of water. In Gunnison National Forest, beaver ponds have proved effective barriers in checking forest fires.

Now More Valuable Alive Than as Pelts

Once sought by white men and Indians alike for his skin, the nervous little thick-tailed creature—measuring a scant three feet from chin whiskers to tail tip—was formerly slaughtered ruthlessly. But now his engineering nature makes him more valuable alive than dead. Live beavers are captured in huge basketlike traps and transported from areas where they are plentiful to depleted lands where their dams are needed.

Beavers begin a dam at a site where the stream's bed is firm and the banks are bordered by young trees. Working from the upstream side, they carry sticks and stones, sod and mud, laying the debris across the brook until the water piles up. More sticks are brought to the dam, pushed over the top, and allowed to lie criss-cross against the outer side. The ends of the branches are bound into the structure with mud and stones until it is strong enough to withstand the pressure of the water against it, and high enough to make a "lake" at least six feet deep.

A "Beaver Hat" for the 17th Century Gentleman

As the pond rises, the dam must be extended in length to keep water from running around the edges. Sometimes a completed dam is many times the width of the stream. One built on the Jefferson River near Three Forks, Montana, was 2,140 feet long—over a third of a mile.

Not all beaver-built dams are made of mud and willows. In 1899 several dams of coal were discovered in North Dakota. Beavers had dug their unusual black building material from a nearby cliff.

Around beavers have grown up legend and fiction. Indians linked the warm-coated animals with deity, and some tribes carried a "beaver bundle," a sort of sacred medicine bag. One yarn told by white men about the animals, though long since disproved, is that beavers use their broad, flat tails as trowels in spreading mud; as stake drivers; and as sleds on which to transport sod and earth.

Hundreds of thousands of beaver skins, warm and heavy, were shipped from the New World during colonial times. In one year the Hudson's Bay Fur Com-

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processions, in imitation of the Three Kings' caravan, began to be an Italian feature of the Epiphany. With them came Befana (childish effort to pronounce Epiphany), a legendary old woman who offered to go with the Magi to Bethlehem if they would wait till she finished her housework. They wouldn't wait, and ever since Befana has appeared on Epiphany searching for the Christ Child, visiting every home with gifts for children who have been good.

Epiphany was once a peculiarly German festival, for it celebrated the Magi as the Three Kings of Cologne. Cologne Cathedral has a chapel to shelter the reputed skulls of the three martyred Magi. On the date when the Wise Men were supposed to have laid royal gifts before a Bethlehem manger, German children "plundered" their glittering Christmas trees and devoured all edible decorations.

A French carol shows the popularity in Provence of the pageant of Epiphany. It is acted out with the little pottery or pasteboard figures of the scene of the Nativity. On January 6 the toy Bethlehem group is completed by the Three Kings.

Mock monarchs presided over England's January 6, a climax to the Twelve Days of solemnity and tradition beginning with Christmas and, therefore, called Twelfth Night as well as "Old Christmas." These undignified dignitaries, whose job harks back to the pagan Roman Saturnalia, have been crowned as Lord of Misrule, Abbot of Unreason, and the Boy Bishop. Their rule so often featured a masque or comedy that Shakespeare named a play after the occasion, *Twelfth Night*.

Note: References to articles describing places which have Christmas on days other than December 25, are: "Magyar Mirth and Melancholy," *National Geographic Magazine*, January, 1938; "The Spell of Romania," April, 1934; and "A Bit of Elizabethan England in America," December, 1933.

Bulletin No. 2, January 3, 1938.

Photograph courtesy Romanian Legation

"BLESSING THE WATERS" IS SIMILAR ON THE DAMBOVITA AND THE GULF OF MEXICO

It is the baptism of Jesus which is now commemorated on January 6 by the Blessing of the Waters in Bucharest on the Romanian Dambovita River (above)—ceremony similar to a pre-Christian consecration of Egypt's Nile, occurring at the same time of year. A cross is thrown into the waters by an official of the Greek Orthodox Church, and the devout plunge in to retrieve it. In the United States this ceremony occurs among Greek immigrants at Tarpon Springs, Florida, on the Gulf of Mexico.

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Norway Makes Spelling a Matter of National Concern

SPELLING lessons are being re-learned in Norway. That progressive Scandinavian country has just adopted new rules for spelling and grammar.

The Norwegian language is complicated by use of an alphabet of 29 instead of the English 26 letters. Then the question arises, "*Which* Norwegian language?"

Although generally unknown to the rest of the world, Norway has for five centuries had two languages. One is called the *riksmaal,* or the official state language, and the other the *landsmaal,* or the speech of the people who get their living from the land down on the farm. The official *riksmaal* is also called *bokmaalet,* the book language. It is used in much of Norway's classic literature, notably the plays of Ibsen.

When Norway Had Danish Queen

To explain the two languages, a chapter from history is required for the *riksmaal;* a chapter from geography for the *landsmaal.* The former is due to four centuries of Danish domination of Norway's government. The latter was brought about by Norway's geography, with sturdy Norsemen living in valleys too lonely and isolated to be influenced by foreign rulers.

The language of Ibsen's plays came to the land of the Vikings at the end of the 14th century, when King Haakon VI of Norway married Margaret, daughter of Denmark's king. When both her husband, Norway's ruler, and her son, Denmark's ruler, died within a decade, bewildered Margaret found herself queen of two countries. From that time until 1814 they remained under one rule.

During the period of Danish government, Norway used the Danish language for state documents, for court conversations, and for literature. This Danish-as-spoken-in-Norway gave rise to the *riksmaal.* It is now chiefly the language of cities, particularly in the eastern part of Norway. Conservatives among the writers, too, depend on it, with Sigrid Undset, leading lady of Norse literature, and Knut Hamsun ranking as possibly the greatest living users.

Traces of Old Norse Culture in Isolated Valleys

The *landsmaal,* too, is making its way into literature, although it was not used by writers until the middle of the past century. *Landsmaal* is both the oldest and the newest language in Norway. It stems from the speech of the ancient Vikings, whose old Norse was understood throughout Europe for a century or two, at least in war cries and piratical demands. After Danish came to court, old Norse was neglected.

These new-old words had to be collected from the countryfolk of every province, particularly from remote clusters of independent Norwegians who staunchly defended native mountain pockets and Viking culture against outside influence. Almost every valley had its own dialect, but farmers from different sections of the country had no difficulty in understanding one another's comments on the crops or invitations to a cup of coffee. Dialects flourish especially in western Norway, where long arms of the sea hamper contact between settlements a few miles apart.

Difficulties of communication played a large part in preserving the *landsmaal.* So much of Norway is ridged by glaciers or drowned by encroaching sea that only one-fortieth is cultivated. Historians have wondered whether the trouble attached to traveling in mountainous rural Norway by land wasn't one reason why the Vikings of old took to the water and made themselves the most feared and fearless mariners of their day.

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pany exported 175,000 hides from what is now the United States and Canada. As early as 1663, a gentleman was not in style without his beaver hat. A good one cost more than four pounds.

Beaver pelts provided funds to build and furnish the first parish church in Quebec. In western United States, beaver pelts often served as currency.

New York Streams Restocked

The Adirondack region was home to at least a million beavers when the white man came to New York, but by 1895 naturalists declared that if every stream were searched, no more than 5 to 10 would be found. Vigorous new stock has since been imported from Yellowstone National Park, however, and under strictly enforced game laws, a rapid increase has taken place.

In Minnesota's Itasca State Park, wherein lie the headwaters of the Mississippi River, beavers under protection are multiplying year by year. In 1924, when the irrigation supply of the Minnesota and North Fork Valleys ran low, the fruit crop was about to be lost. Fourteen large beaver ponds located above the head of the irrigation canal were tapped and the water, carried down into the valleys, saved the orchards.

Note: See "Mickey the Beaver," in the *National Geographic Magazine*, December, 1928. Additional illustrations of beavers may be found in "With Wild Animals in the Rockies," February, 1935; "Canada from the Air," October, 1926; and "The Wild Life of Lake Superior," August, 1921.

See also "Hunting Wild Life with Camera and Flashlight," in two volumes, by George Shiras, 3d. A pamphlet describing this, and other nature books published by the National Geographic Society, will be sent upon request.

Bulletin No. 3, January 3, 1938.

Photograph by James MacGillivray

A BEAVER FLOOD-CONTROL UNIT TO THE RESCUE

A break in his dam is the beaver's danger signal. He promptly swims to the breach with a mouthful of wood for repairs, even by day, although his normal working hours come at night. Naturalists sometimes break his dam to make him appear by daylight. He plugs up the hole with vertical stakes, pushed into the dam wall, then piles branches across. The busy beaver's engineering efforts result in a small but effective contribution toward equalizing water supply and preventing floods.

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Sea Safety Due to Inventors as Well as Lighthouse Keepers

THE death, in December, of the blind Swedish scientist, Dr. Gustaf Dalen, reminds seamen how much they owe to his "eye" for mariners—the automatic lighthouse beacon. Before an explosion blinded him, Dr. Dalen perfected a "sun valve" which automatically turns on beacons as darkness falls and turns them off again when daylight comes. Thus, many a sailor comes safely home from the sea, because unmanned automatic lighthouses have since been placed in remote danger spots. They need to be visited only once a year to fill the beacons with fuel.

Dr. Dalen's invention added a great number of new lighthouses to the United States. Navigation profited by these additional guiding lights in clear weather, but in fog and storm something more was necessary. "Self-announcing" lighthouses, to tell the sailor just how close he is to rocks or shoals, even when a pea-soup fog shut them from view, have also recently been installed by the United States Lighthouse Service.

Tests Held on Atlantic Coast

Radios and sound signals are the features of these new aids to safer navigation. Each signal station sends a combination which tells the navigator his distance from the dangerous reefs or shoals it marks.

Twenty-nine stations sending such signals, scattered along the Atlantic and Gulf coasts from West Quoddy Head, near Eastport, Maine, to the Southwest Pass of the Mississippi River, recently took part in the most elaborate demonstration of their use ever arranged. They operated continuously during daylight hours to give all passing ships the opportunity to test out the new method, and to judge its accuracy.

In the stress of making harbor in a fog, shipmasters usually are too concerned to rely on an unfamiliar method. The tests by distance-finding observations were made in good weather and in daylight because it was realized that, when the accuracy of the new method was revealed by bearings taken from visible landmarks, mariners would gain enough confidence in the signals to rely on them later when fog obscured the station sending them.

First Use of the Signal

When approaching land in fog, it is often possible to hear sound fog signals from a lighthouse or lightship; yet, because of the vagaries of sound traveling through fog, the hearer may be unable to determine with any accuracy his distance from the sending station. This difficulty, which has caused many sea disasters, is greatly reduced by the new "distance-finding" signals, which really are "distance-telling" signals.

Two signals are sent together—a radio beacon signal and another by sound. The mariner notes the time that elapses between arrival of the radio signal, which comes in first, and reception of the sound signal. By calculations based on this lapse of time, he can determine how many miles he is from the sending station. The signals can be picked up by all ships fitted with radio direction finders or even simple radio broadcast receivers, if they can be tuned to the proper wave length. Sound signals are sent, of course, by the usual fog horn or siren.

This method of distance-telling was first tried out by the United States Lighthouse Service in 1929, at Cape Henry Lighthouse, Virginia, and at Poe Reef Lighthouse, in the upper end of Lake Huron.

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From rural valleys protected by rocky mountain walls and deep fjords, 19th century Norwegians began to learn again a language that their city dwellers had forgotten. Poetry was published in the *landsmaal* of the countryfolk. Then came a collection of old Norse folk tales of great surly trolls, mountain giants, and cunning little dwarfs. When Ivar Aasen compiled a *landsmaal* dictionary, Norway could not deny that she had two complete languages!

A few years ago the homespun *landsmaal* was acknowledged as Norway's official tongue on an equal footing with the stately stilted *riksmaal*. Official documents can now be couched in either, and local officials may choose whichever they prefer. In most schools the *riksmaal* is still official, but *landsmaal* as well is taught in all high schools and colleges.

In another century, to judge by the present trend, they will merge into a single national language. Changes in spelling and grammar are tending to bridge the gap between the two—by writing words in *riksmaal* as they are pronounced. The word for "boat" in *riksmaal* had been carefully spelled *baad,* although the people pronounced the final *d* as *t;* a typical change was to spell it *baat*.

Note: The history, customs, and costumes of Norway are described and illustrated in "Life in a Norway Valley," *National Geographic Magazine,* May, 1935; "Norway, A Land of Stern Reality," July, 1930; "Norway and the Norwegians," June, 1924; and "Sailing the Seven Seas in the Interest of Science," December, 1922.

See also "Country-House Life in Sweden," *National Geographic Magazine,* July, 1934; "Royal Copenhagen, Capital of a Farming Kingdom," February, 1932; "Granite City of the North," (Stockholm), and "Sweden, Land of White Birch and White Coal," October, 1928; and "Denmark and the Danes," August, 1922.

Bulletin No. 4, January 3, 1938.

© *A. B. Wilse*

IN ISOLATED NORSE FARMHOUSES THE *LANDSMAAL* WAS SAVED

When harvest and dairy chores are finished, Norwegian womenfolk spin and sew beside a window and watch passersby along the road. Although ridges and fjords still make roads steep, farms are less isolated since the stringing of telephone lines. Dark full skirts with striped borders and ample linen blouses are homespun in many cases, and the bright wool embroidery on snug bodice shows what the wearer does with her time when days are long enough for a bit of fancywork between work and dark.

The following year seven additional stations were placed in operation on the Great Lakes, where mariners already were making use of radio beacon signals for calculating their positions. The use of a distance-telling device was but another step. In 1931 ten more stations were given the new equipment, including two on the Pacific coast: the Blunts Reef Lightship, California, and Grays Harbor Lighthouse, Washington.

Blunts Reef Lightship lies a short way off Cape Mendocino, a promontory which must be rounded by all ships bound up or down the coast. Because of reefs extending seaward from the Cape, ships must keep well offshore. Calculation of distance was formerly difficult when fog obscured everything. With the new signals, mariners can compute accurately their distance from the lightship and reefs.

Note: See "New Safeguards for Ships in Fog and Storm," *National Geographic Magazine*, August, 1936; and, for purposes of comparison with shipping safeguards of a quarter-century ago, see "Beacons of the Sea," January, 1913.

For other illustrations of radio, air, and lighthouse beacons, see "Machines Come to Mississippi," *National Geographic Magazine*, September, 1937; "Maine, The Outpost State," May, 1935; "A Bit of Elizabethan England in America," December, 1933; "Flying," May, 1933; "Out in San Francisco," April, 1932; "Sweden, Land of White Birch and White Coal," October, 1928; "Life on a Coral Reef," January, 1927; "Measuring the Sun's Heat," January, 1926; and "Man's Amazing Progress in Conquering the Air," July, 1924.

Bulletin No. 5, January 3, 1938.

Drawn by R. E. Yates, U. S. Lighthouse Service

RADIO MAKES THE LIGHTHOUSE GO HIGH-HAT

What would have been a complete lighthouse only fifteen years ago is now topped by a radio mast. In addition to a strong light, the station has a diaphone fog signal and a radio-beacon to tell mariners not only where a dangerous reef is, but how far away it is from the listeners' ship. The radio beacon is the best weapon with which sailors can fight fog. The modernistic station shown in this architect's drawing was designed to replace a lightship at Gray's Reef, in northeastern Lake Michigan.